



DOCKET NO. 220983US0PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :  
MANABU SUHARA, ET AL. : EXAMINER: CANTELMO, G.  
SERIAL NO: 10/089,109 :  
FILED: MARCH 26, 2002 : GROUP ART UNIT: 1745  
FOR: LITHIUM-COBALT COMPOSITE :  
OXIDE, METHOD FOR PREPARING THE  
SAME, POSITIVE ELECTRODE FOR  
LITHIUM SECONDARY CELL AND  
LITHIUM SECONDARY CELL USING  
THE SAME

SECOND REPLY BRIEF

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

The following is a Second Reply Brief in reply to the Examiner's Answer dated April 19, 2006 (third Answer).

A Reply Brief was filed June 24, 2005 (Reply Brief) in reply to an Examiner's Answer dated June 3, 2005 (second Answer). (A Request for Oral Hearing was also filed on that date, which Applicants still maintain.) On March 9, 2006, the Board returned the application to the Examiner, after which the above-referenced third Answer was entered.

The third Answer is substantively the same as the second Answer, although it does respond to the Reply Brief. Applicants submit that the Reply Brief sufficiently replies to the third Answer except that part of the third Answer that responds to the Reply Brief and that therefore, this Second Reply Brief could be confined to that part of the third Answer that

responds to the Reply Brief. However, for purposes of convenience to the Board, this second Reply Brief will be a self-contained reply, making reference to the Reply Brief unnecessary.

The Appeal Brief, filed March 3, 2005, as indicated therein at pages 4-5, is partially in response to an Examiner's Answer dated December 3, 2003 (first Answer). The first Answer was, in effect, withdrawn by the Examiner so that two new grounds of rejection could be added. The second Answer is substantially verbatim to the first Answer, with additional arguments in response to the Appeal Brief. The relationship between the second Answer and the third Answer has been discussed above.

Appellants have identified these new arguments in the second and third Answers at page 29, second full paragraph through the end of page 30, first full paragraph; page 32, second and third full paragraphs; page 33, fourth paragraph through the paragraph bridging pages 33 and 34; page 38, the sentence at lines 2-5; page 40, third paragraph through the paragraph bridging pages 40 and 41; page 41, fourth full paragraph through the paragraph bridging pages 41 and 42; page 45, fifth paragraph; and pages 46 through the first full paragraph at page 48. In addition, the third Answer continues at page 48, second full paragraph through the end to respond to the Reply Brief.

Since the points and arguments remaining in the third Answer have already been responded to in the Appeal Brief, the Reply Brief is limited to the new arguments, identified above, and the response to the Reply Brief.

#### Ground (A)

The Examiner finds that he appreciates Appellants' position that changes in process conditions and starting materials can affect the half-width, and while this has been shown by the comparative examples in the specification, "there is no clear evidence that the differences present in Appellant's comparative examples are present in [Aoki et al]. In fact, it would

appear that the differences discussed in the comparative examples in the instant application are not present in [Aoki et al]" (third Answer at 29).

In reply, the Examiner has no basis for finding that, in effect, differences in half-width are not present in Aoki et al. Tables 1 and 2, at paragraphs [0062] and [0065] of Aoki et al, demonstrate that Aoki et al contemplate differences in process conditions and starting materials. Appellants' evidence conclusively shows that such variation in Aoki et al would be expected to change the half-width therein.

The Examiner finds that Aoki et al discloses the same particle sizes as used in at least some of Appellants' inventive examples, while Aoki et al does not employ the larger particle sizes employed in Appellants' comparative examples (third Answer at 29).

In reply, each directly comparable Example and corresponding Comparative Example in the specification herein uses the same particle size material; the only difference is the mixing ratio of the starting materials. Compare Example 15 with Example 1, and Example 16 with Example 5.

If the Examiner is referring to Examples 9 and 12-14 herein, these examples are all according to the invention herein. They were discussed in the Appeal Brief to show how differences in average particle size, specific surface area and firing temperature, affect both the half-width and the capacity retention changed. There is no disclosure in Aoki et al with regard to particle size to suggest that the presently-recited half-width is inherent in Aoki et al. At any rate, particle size of the reactants is only one, but not the only, variable.

The Examiner also finds a difference in specific surface area of the particles (third Answer at 29-30). In reply, what was stated above with regard to particle size applies herein as well.

The Examiner finds that the particle sizes and specific surface area of Appellants' inventive examples and that of Aoki et al are "substantially identical," and therefore, support the Examiner's finding of inherency (third Answer at 30).

In reply, the Examiner does not define what the scope is of "substantially identical." Nevertheless, substantially identical particles sizes and specific surface areas are not sufficient to support a finding of inherency, especially since starting materials used also affect the half-width.

Regarding the separate patentability of Claims 12 and 14, the Examiner cites various precedent to the effect that when a product by process appears to the same or obvious over a product, although made by a different process, of the prior art, the burden is on the Applicant to show an unobvious difference between the claimed product and the prior art product (third Answer at 32 and 33-34). In reply, Appellants have already demonstrated, in the discussion of the comparative data of record, how the claimed process affects the product formed, and thus its properties.

#### Ground (C)

The Examiner finds that "Appellant fails to reason or explain how the specific example identified above does not inherently have the same characteristics when it is apparent that this product falls expressly within the same range of the instant claims" (third Answer at 38). The "example identified above" appears to be the entries in Tables 3, 4 and 5 when Y is 0.02 of Toyoguchi.

In reply, Appellants have already demonstrated with respect to the examples herein that the starting materials, *inter alia*, affect the half-width of the product produced. Thus, it is not reasonable to expect that the relied-upon comparative examples in Toyoguchi meet the terms of the present claims.

With regard to the separate patentability of Claims 12 and 14, the Examiner cites the same precedent as discussed above with regard to Ground (A) (third Answer at 40-41 and 41-42).

Appellants' reply is the same as the reply for Ground (A), *supra*.

Grounds (F)-(H)

The Examiner finds that the process conditions of the present invention and that of co-pending application '205 "are identical in scope," and thus the respective product would be expected to be identical and would inherently exhibit the same characteristics (third Answer at 45).

In reply, the claims of co-pending application '205 contain no process conditions. In addition, while Claims 8-13 of co-pending application '205 may recite a half-width within the terms of the presently-recited half-width, there is still no reason to presume that the claimed invention herein meets the inclination of the distribution curve values of Claim 1 (from which said Claims 8-13 depend) of co-pending application '205. In addition, Claims 9-13 of co-pending application '205 do not even meet the compositional limitations of the present invention.

Ground (I)

Claims 12-14 are drawn to a product-by-process. Appellants have shown in the comparative data of record that process conditions and starting materials affect the product formed and its characteristics.

Appellants' Closing Statements

Regarding the Examiner's findings under this heading (third Answer at 46-48), Appellants submit that they have already fully replied thereto in this Second Reply Brief and in the Appeal Brief.

Response to the Reply Brief filed June 24, 2005

The Examiner has responded to everything that has been argued up to this point in this Second Reply Brief by simply stating that the PTO bears a lesser burden of proof when a claimed product-by-process appears to be the same or similar to a prior art product made by a different process, and that Applicants have provided no evidence to support their arguments that the claimed product is different from those disclosed by the prior art (third Answer at 48).

In reply, Applicants submit that their arguments are well-supported by the evidence of record, as detailed in this Second Reply Brief and in the Appeal Brief.

For all the above reasons, it is respectfully requested that all of the rejections of record be REVERSED.

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